

ProTec T2-PV 1+0

Type 2



Location of Use: String box, Inverter
 Mode of Protection: (+/-) -PE
 Surge Ratings: $I_n = 20 \text{ kA}$ (8/20 μs)
 EN Category: Type 2
 Housing: Pluggable Design
 Compliance: EN 50539-11:2013+A1:2014

Technical Data

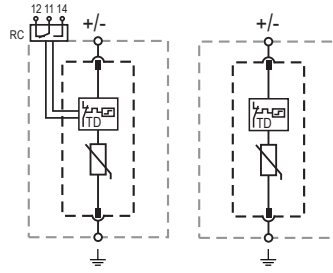
ProTec T2-xxxPV-1+0(-R)		150	250	600
EN Electrical				
Maximum Continuous Operating DC Voltage	U_{CPV}	150V	250V	600V
Nominal Discharge Current (8/20 μs)	I_n		20kA	
Maximum Discharge Current (8/20 μs)	I_{max}	40kA	40kA	40kA
Voltage Protection Level @ 20kA (8/20 μs)	U_p	1250V	1250V	2500V
Response Time	t_A		< 25ns	
Short-Circuit Current Rating	I_{SCPV}		11kA	
Number of Ports				1
Mechanical & Environmental				
Operating Temperature Range	T_a	-40 °F to +185 °F [-40 °C to +85 °C]		
Permissible Operating Humidity	RH	5%...95%		
Altitude (max)		13123 ft [4000m]		
Terminal Screw Torque	M_{max}	39.9 lbf-in [4.5Nm]		
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible) 35 mm ² (Solid, Stranded) / 25 mm ² (Flexible)		
Mounting		35 mm DIN Rail, EN 60715		
Degree of Protection		IP 20 (built-in)		
Housing Material		Thermoplastic: Extinguishing Degree UL 94 V-0		
Thermal Protection		Yes		
Operating State / Fault Indication		Green Flag / Not Green Flag		
Remote Contacts (RC)		Optional		
RC Switching Capacity		AC: 250V/1A, 125V/1A; DC: 48V/0.5A, 24V/0.5A, 12V/0.5A		
RC Conductor Cross Section (max)		16 AWG (Solid) / 1.5mm ² (Solid)		

ProTec T2-PV 1+0

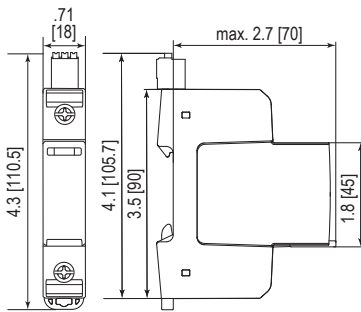
Internal Configuration

Legend

- +/-, -/+ Terminal for +/-, -/+ Conductor
- ⊥ Terminal for PE/G Conductor
- RC Remote Contacts Optional
- TD Thermal Disconnect



Complete Unit

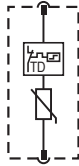


Dimensions & Packaging

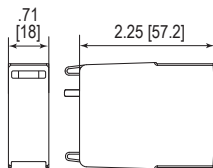
		150	250	600
ProTec T2-xxxPV-1+0	Single Unit Weight	pounds .276	.288	.302
		grams 125	131	137
ProTec T2-xxxPV-1+0-R	Single Unit Weight	pounds .291	.304	.317
		grams 132	138	144
Single Unit DIN 43880 Dimension		3 TE / 2.13 [54]		
Packaging Dimensions (HxWxL)		4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]		
Standard Order Quantity		12 Units		

Plug Internal Configuration

ProTec T2-XXXPV-P



Spare Plug



Dimensions & Packaging

		150	250	600
ProTec T2-xxxPV-P	Single Unit Weight	pounds .150	.136	.150
		grams 68	62	68
Single Unit DIN 43880 Dimension		1 TE / .71 [18]		
Packaging Dimensions (HxWxL)		2.9 x .9 x 1.9" [73 x 24 x 49 mm]		
Standard Order Quantity		24 Units		

inches
[mm]

Information contained in this document is subject to change at any time without notice.



Pluggable Multi-Pole SPD for Photovoltaic Systems

ProTec T2-PV 3+0 Y

Type 2



Location of Use: String box, Inverter
 Mode of Protection: (+)-PE, (-)-PE, (+)-(-)
 Surge Ratings: $I_n = 20 \text{ kA (8/20 } \mu\text{s)}$
 $I_{\text{Total}} = 50 \text{ kA (8/20 } \mu\text{s)}$
 EN Category: Type 2
 Housing: Pluggable Design
 Compliance: EN 50539-11:2013+A1:2014

Technical Data

ProTec T2-xxxPV-3+0(-R)

150

250

600

EN Electrical

Maximum Continuous Operating DC Voltage	U_{CPV}	150V	250V	600V
Nominal Discharge Current (8/20 μs)	I_n		20 kA	
Maximum Discharge Current (8/20 μs)	I_{max}	40 kA	40 kA	40 kA
Total Discharge Current	I_{Total}	50 kA	50 kA	50 kA
Voltage Protection Level @ 20kA (8/20 μs)	U_p	1250V	1250V	2500V
Response Time	t_A		< 25 ns	
Short-Circuit Current Rating	I_{SCPV}		11 kA	
Number of Ports			1	

Mechanical & Environmental

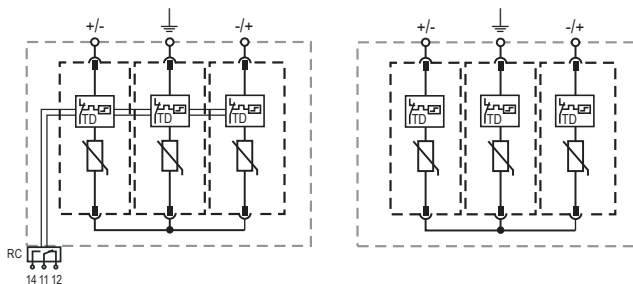
Operating Temperature Range	T_a	-40 °F to +185 °F [-40 °C to +85 °C]		
Permissible Operating Humidity	RH	5%...95%		
Altitude (max)		13123 ft [4000m]		
Terminal Screw Torque	M_{max}	39.9 lbf-in [4.5Nm]		
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible) 35 mm ² (Solid, Stranded) / 25 mm ² (Flexible)		
Mounting		35 mm DIN Rail, EN 60715		
Degree of Protection		IP 20 (built-in)		
Housing Material		Thermoplastic: Extinguishing Degree UL 94 V-0		
Thermal Protection		Yes		
Operating State / Fault Indication		Green Flag / Not Green Flag		
Remote Contacts (RC)		Optional		
RC Switching Capacity		AC: 250V/1A, 125V/1A; DC: 48V/0.5A, 24V/0.5A, 12V/0.5A		
RC Conductor Cross Section (max)		16 AWG (Solid) / 1.5 mm ² (Solid)		

ProTec T2-PV 3+0 Y

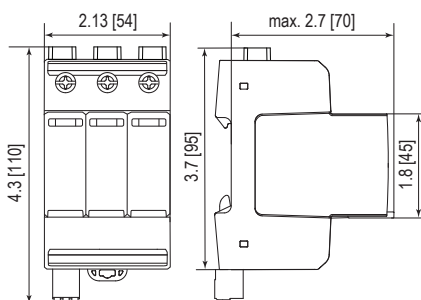
Internal Configuration

Legend

- +/-, -/+ Terminal for +/-, -/+ Conductor
- ⊥ Terminal for PE/G Conductor
- RC Remote Contacts Optional
- TD Thermal Disconnect



Complete Unit

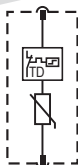


Dimensions & Packaging

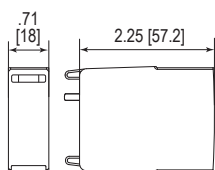
		150	250	600
ProTec T2-xxxPV-3+0	Single Unit Weight	pounds .681	.701	.723
		grams 309	318	328
ProTec T2-xxxPV-3+0-R	Single Unit Weight	pounds .693	.712	.734
		grams 314	323	333
Single Unit DIN 43880 Dimension		3 TE / 2.13 [54]		
Packaging Dimensions (HxWxL)		4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]		
Standard Order Quantity		5 Units		

Plug Internal Configuration

ProTec T2-XXXPV-P



Spare Plug



Dimensions & Packaging

		75	125	300
ProTec T2-xxxPV-P	Single Unit Weight	pounds .108	.114	.123
		grams 49	52	56
Single Unit DIN 43880 Dimension		1 TE / .71 [18]		
Packaging Dimensions (HxWxL)		2.9 x .9 x 1.9" [73 x 24 x 49 mm]		
Standard Order Quantity		24 Units		

inches
[mm]

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